What is claimed is:

1. A sliding component comprising:

a metal base member having a sliding surface; and

a coating layer made of silane-modified resin, the silane-modified resin being made from resin that is soluble in solvent and is equal to or higher in heat-resistant than epoxy resin, the coating layer being formed on the sliding surface.

2. The sliding component according to claim 1, wherein the coating layer contains solid lubricant.

3. The sliding component according to claim 2, wherein the solid lubricant includes at least one of fluororesin, molybdenum disulfide and graphite.

4. The sliding component according to claim 3, wherein the fluororesin is selected from the group consisting of polytetrafluoroethylene, perfluoroalkoxy alkane, ethylene-tetrafluoroethylene copolymer and fluoroethylenepropylene.

5. The sliding component according to claim 2, wherein the coating layer contains at least one of hard particles, extreme-pressure agent and surface-active agent.

6. The sliding component according to claim 1, wherein the silane-modified resin includes one of an alkoxysilyl group and an aryloxysilyl group.

7. The sliding component according to claim 6, wherein an alkoxy group of the alkoxysilyl group includes 1 to 6 carbon atoms.

8. The sliding component according to claim 7, wherein the alkoxy group includes 1 to 4 carbon atoms.

9. The sliding component according to claim 8, wherein the alkoxy group is selected from the group consisting of a methoxy group, an ethoxy group and a propoxy group.

10. The sliding component according to claim 6, wherein an aryloxy group of the aryloxysilyl group includes 6 to 10 carbon atoms.

11. The sliding component according to claim 10, wherein the aryloxy group includes 6 to 8 carbon atoms.

12. The sliding component according to claim 11, wherein the aryloxy group is selected from the group consisting of a phenyloxy group, a dimethylphenyloxy

group and a methylphenyloxy group.

13. The sliding component according to claim 1, wherein the silane-modified resin is a silane-modified polyamideimide resin.

14. The sliding component according to claim 13, wherein the polyamideimide resin includes at least one of a carboxyl group and an acid anhydride group at its terminal of molecule, glycidylether group-containing alkoxysilane partial condensate being obtained by dealcoholization of glycidol and alkoxysilane partial condensate, the silane-modified resin being obtained by ring opening esterification reaction between the polyamideimide resin and the glycidylether group-containing alkoxysilane partial condensate.

15. The sliding component according to claim 13, wherein the coating layer of the silane-modified resin is formed by applying and calcining silane-modified polyamideimide resin varnish containing 1 to 10 weight percent of silica in its cured residue.

16. The sliding component according to claim 1, wherein the silane-modified resin is a silane-modified epoxy resin.

17. The sliding component according to claim 1, wherein the silane-modified

resin is a silane-modified polyimide resin.

18. The sliding component according to claim 1, wherein the sliding component is a component of a compressor.

19. The sliding component according to claim 18, wherein the compressor is a swash plate type, a swash plate of the compressor corresponding to the sliding component.

20. The sliding component according to claim 18, wherein a shoe of the compressor corresponds to the sliding component.

21. The sliding component according to claim 18, wherein a plane bearing for supporting a drive shaft of the compressor corresponds to the sliding component.

22. The sliding component according to claim 18, wherein the compressor is a piston type, the compressor including a housing, a drive shaft and a rotary valve that corresponds to the sliding component, the rotary valve being integrated with the drive shaft and supporting the drive shaft on the housing, the housing defining a compression chamber, a suction pressure region and a gas passage, the gas passage interconnecting the compression chamber and the suction pressure region, the rotary valve opening and closing the gas passage as the rotary valve

synchronously rotates with the drive shaft.

23. The sliding component according to claim 18, wherein the compressor is a piston type, a piston of the compressor corresponding to the sliding component.